MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

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Response to Public Comments

Regarding

General Permit for Discharges from Surface Coal Mines and Related Facilities

State Discharge Permit No. 11-CM

NPDES Permit No. MDG85

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General Discharge Permit No. 11CM (NPDES No. MDG85) applies to discharges from surface coal mines and related facilities in the state of Maryland. The Department has proposed to reissue State/NPDES (National Pollution Discharge Elimination System) General Permit for Discharges from Surface Coal Mines and Related Facilities with revisions to the previously issued permit (No. 06CM) as summarized below.

The renewal permit requires that the Notice of Intent (application) include better descriptions of the processes, sources of wastewater, and flows relevant to the permit conditions, and whether the receiving stream is high quality (Tier II) or impaired. Also required is the addition of a site map illustrating discharge locations. Discharges to high quality (Tier II) waters and impaired waters may or may not be eligible for coverage.

The definition for *active mining areas* has been updated to be consistent with the federal definition in 40 CFR 434.11. For active mining area discharges, limits for turbidity, total iron, total manganese and pH are continued from the previous permit and other limits have been added or changed as follows: total suspended solids (35 mg/l average, 70 mg/l maximum), settleable solids (0.5 Ml/l maximum), temperature (68°F for Use III and III-P waters, 75°F for Use IV and IV-P waters, and 90° for Use I and I-P waters), and selenium (0.02 mg/l maximum). In addition, for active mining area discharges, monitoring (without limits) has been added as follows: specific conductance, chloride, sulfates, aluminum, antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, silver, thallium, zinc, mercury, bromide, and total dissolved solids.

For post-mining reclamation area drainage, pH limits are continued from the previous permit but new limits have been added for temperature (68°F for Use III and III-P waters, 75°F for Use IV and IV-P waters, and 90° for Use I and I-P waters). In addition, the settleable solids effluent limit has been expanded to include access roads, non-controlled surface mine draining and discharges from preparation plants.

This permit now also authorizes discharges from remining activities provided that the facility voluntarily submits an application for coverage under the terms and limits of this general permit instead of seeking the allowances for remining applicable under COMAR 26.08.03.08 through issuance of an individual permit.

The Department proposes to change the requirements for transfer of authorization under this permit from 'non-transferable to a person' to 'non-transferable to a changed location'. This ensures the Department is not authorizing a discharge at a new location without appropriate review through submission of a new application.

Finally the permit updates various standard permit conditions. The updated standard permit conditions include, but are not limited to: requirements to obtain coverage under an individual permit, as necessary; termination of coverage under a permit; continuation of an expired general permit; and notice of intent (application) requirements.

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The Department received oral testimony at the June 19, 2013 hearing and written comments on the tentative determination during the public comment period. A summary of the significant comments and the Department's responses and changes are listed below.

1. COMMENT

The question was raised as to why changes in the current permit are necessary considering the longevity of the coal mining effluent limitation guidelines and stability of the Clean Water Act.

RESPONSE

Congress would not have established a five-year permit cycle if they had not anticipated the need for permits to evolve and progress. Circumstances have changed. TMDLs have finally been implemented. Anti-degradation regulations have changed and with that, the identification of high quality waters. Water quality standards have changed with triennial reviews. Analytical techniques have changed and improved, as has knowledge of deleterious effects of pollutants. Finally, so often, only after issuance of a permit, does the Department identify text that needs clarification or correction. So the need for changes is inevitable.

2. COMMENT

There was a concern that identification of groundwater was not appropriate in the Geographic Coverage section, Part I.A. There was another comment that groundwater should mean groundwater seepage to surface waters.

RESPONSE

Regarding the first comment, this permit remains a predominately surface water discharge permit. The Department does not intend to incorporate in this permit the regulation of underground injection systems or any other aggressive disposal of wastewater to groundwaters of the State, and there is nothing in the proposed permit to contradict this. The mention of groundwater is in recognition that there may be some incidental release of wastewater to groundwaters by seepage from ponds, the mine, or where the discharge is into an intermittent or ephemeral stream. While the permit does not propose special limits for such, it must recognize that some flow is directed to groundwater.

Regarding the second comment, this is to confirm that the Department means discharge <u>to</u> groundwater, not <u>of</u> groundwater. This is in accordance with COMAR 26.08.03 and 26.08.04, which require a permit for any discharge of wastewater to State waters (State waters including groundwater).

3. COMMENT

There was concern that listing of discharges to Tier II and TMDL-regulated waters in the ineligibility section Part I.C.7, would preclude many if not all current dischargers from coverage under this permit.

RESPONSE

Few facilities will be considered ineligible because, as stated in Part VII.I, the Department expects the limits in Part IV will be sufficiently protective of water quality. This ineligibility description simply puts the potential permittee on notice that Department may have to impose extra restrictions, through an individual discharge permit or the mining permit, to protect water quality.

4. COMMENT

The listing of storm water associated with construction should be removed.

RESPONSE

The Department agrees. In the past, the Department did distinguish between earth disturbance associated with starting a mine and that associated with mineral extraction. The Department has ceased that distinction, and the provision will be deleted.

5. COMMENT

The cause for permit denial specified in Part I.E.6 should be revised.

RESPONSE

The Department now sees that the condition is too broad. An individual permit is going to be pursued either to satisfy water quality protection or to allow full use of re-mining regulations. For the former, if the applicant cannot protect water quality under the individual permit, the compliance is not going to occur under the general permit. Therefore denial is appropriate. For the latter, if the Department does not allow re-mining provisions in an individual permit, there remains the possibility for compliance with the terms of the general permit. Therefore, automatic general permit denial would not be appropriate. The Department will therefore preface the statement with "For persons directed by the Department to obtain an individual permit to achieve water quality protections".

6. COMMENT

There was concern that items e, f, and g of Part I.F.1 are too vague and could be abused.

RESPONSE

These provisions are consistent with 40 CFR122.4(d), which states that no permit may be issued when conditions cannot ensure compliance with applicable water quality standards.

7. COMMENT

Regarding Part I.F.2, there was a request to allow general permit coverage to be extended until an individual permit can be issued or denied.

RESPONSE

The Department agrees with the recommendation, now recognizing that in a storm water-driven discharge, it is not possible to immediately or temporarily cease exposure that generates pollutants. The Department will modify the condition accordingly.

8. COMMENT

There was a suggestion to remove "non-controlled surface mine drainage and mountaintop removal areas from list of authorized discharges in Part IV.B.1.

RESPONSE

The Department concurs. Non-controlled surface mine drainage and drainage from steep slope and mountaintop removal areas are not defined but fit under the general category of "active mining areas." Nothing more needs to be specified.

9. COMMENT

Change the maximum limit for turbidity from 100 NTU to 150 NTU.

RESPONSE

A limit of 100 NTU must remain. The origin of the limit was based on past attempts to correlate the technology-based TSS limit to turbidity, since turbidity lends itself as an expedient field measurement. Whether or not that number remains appropriate for that purpose is not certain.

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However, since the data demonstrates that 100 is widely achievable, anti-backsliding provisions of the Clean Water Act regulations would not allow the Department to now set a higher limit.

10. COMMENT

There were concerns about application of the temperature limit. Specifically, the question was what would be an appropriate accuracy threshold for temperature measurement and where should compliance be measured, with the term "direct flow path" being unclear.

RESPONSE

Regarding monitoring accuracy, temperature is implemented no differently than any other parameter. A permit limit shall be established as an absolute number and a permit shall require compliance to be measured to the level of reliability of the testing procedure or instrument. There are testing protocols for temperature, and they include periodic test for accuracy by a qualified tester against an NIST-certified measuring device. After that check, an appropriate correction factor is determined by a qualified tester and subsequent measurements shall use that correction factor.

Regarding what the Department means by "direct flow path," it was the Department's intent to define the mixing zone and point of discharge to State waters to be where there is flowing or (in the case of a lake or pond) standing water. We recognized that some discharges may disperse in a meadow or sink into the sand and gravel of an otherwise dry drainage path. We are not trying to protect these areas for temperature. On the other hand, if there is sufficient flow or channel configuration to deliver the effluent to a real stream or lake, that is where the permit requires compliance. We have added some clarifying text to the effluent limit page.

11. COMMENT

Are footnotes i and k juxtaposed in Part. IV.B.1?

RESPONSE

The rows for specific conductance, chloride, sulfates, metals, and selenium were incorrectly organized, and the following represents the intent of the fact sheet and agreements pursuant to the review by the USEPA:

- 1) Retain only first sentence of footnote "i" for specific conductance, chloride, and sulfates and replace "indicative discharge" to measurable discharge."
- 2) Transfer remaining text from "i" to "j" and specify monitoring frequency as one/year.
- 3) Require that metals be reported as both total and dissolved.
- 4) Identify selenium as total selenium.

12. COMMENT

Part IV.B.1: Footnote c (regarding manganese) should be changed from "monitoring of" to "Monitoring and limitation of"

RESPONSE

The Department agrees that the proposed change would be consistent with the language in 40CFR434, the effluent limitation guidelines for coal mining.

13. COMMENT

Remove the requirement that an effluent may not cause receiving stream to fluctuate more than 1 SU in 24 hours.

RESPONSE

The Department agrees that this is not a workable requirement and provides no significant benefits to water quality of the receiving stream.

14. COMMENT

Change metals monitoring frequency to yearly.

RESPONSE

That was the Department's original intent, as stated in the fact sheet. The draft was in error. We have corrected this in the final permit.

15. <u>COMMENT</u>

There was a comment that the test method required for mercury, EPA Method 1631 was unnecessary as Methods 245.1 and 245.2 are more than sensitive enough to verify compliance.

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RESPONSE

This method was required by EPA Region III in their October 4, 2012 review of the draft permit.

16. COMMENT

In Part IV.B.2, reduce temperature monitoring frequency to once per quarter and remove limit.

RESPONSE

If there is any potential for a thermal impact, it will be during the May through September time period specified in the permit. So there is no value in sampling at other times of the year. The Department acknowledges that post mining impoundments might not have a thermal impact and after sufficient data is available, would consider reduction in monitoring on the next permit. Regarding elimination of a limit, the limit is appropriate because to comply with the water quality standard is a requirement of COMAR. If other comments made about the infrequency of summer discharges are true, then temperature monitoring should not be a burden. The Department has reduced the frequency however from two per month to one per month.

17. COMMENT

Storm water requirements leading to a SWPPP are more involved than previous permit and unduly burdensome. Not commented on, was that this section also distinguishes between construction activity and mining.

RESPONSE

The Department has changed the opening paragraph of Part IV.D to read:

"All construction and mining activity shall be in accordance with Best Management Practices (BMPs) to control storm water runoff including the conditions of the mining permit issued by the Maryland Department of the Environment and the Sediment and Erosion Control Plan approved by the Soil Conservation District. BMPs shall include treatment requirements, operating and maintenance procedures, prohibitions of activities, and other management practices to control runoff from the haul roads and construction areas so as to prevent or reduce the contribution of pollutants to the waters of this State. The BMPs shall be addressed by completing a storm water pollution prevention plan (SWPPP) which shall be updated as necessary and available on site at all times."

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Most of what comprises a storm water pollution prevention plan at a surface mine are the BMPs of a sediment and erosion control plan. Unlike a sediment and erosion plan, a SWPPP addresses other pollutants, such as those associated with vehicles, other mechanical equipment, and storage of supporting materials. This change puts surface coal mines and related facilities on the same footing as all other industrial activities, included non-coal surface mines.

18. <u>COMMENT</u>

There was a request to restore, in the transfer of ownership authorization, the option to require coverage under another general permit.

RESPONSE

The Department agrees to this change. The Department removed that option because at the time it recognized no other general permit fitting the activities at coal surface mines and related facilities. With the issuance of 12-SW, the new general permit for storm water associated with industrial activity, there may now be some application of that permit to some coal facilities.

19. COMMENT

Notice of Intent requirements: There was a request to provide links to forms, provide information on permit fees, and change the deadline for notification of changes,

RESPONSE

All permits, forms, and related material is currently found at http://www.mde.state.md.us/programs/Permits/WaterManagementPermits/water_permits/index.aspx and will continue there until such time as the Department modifies its website. Regarding permit fees, they are specified in COMAR 26.08.04.09-1D. They are currently unchanged from those associated with 06-CM. If and when the Department proposes to change fees, there will be a public comment opportunity for changing the regulation. The fee schedule is not included in the text of this permit so that there is no need to also reopen the general permit for the same change. Regarding notification, the Department agrees to the consistent deadline of 60 days. The condition is standard, and is included on the theory that nature of processes, location of outfalls, and volume of discharge all influence the decision on what is appropriate content for an individual permit and what NOIs should be approved for general permits. The information is also useful for compliance inspectors.

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20. COMMENT

Part IV.B.1, Footnote a: There was a request to change "equivalent to" to "equivalent to or exceeding" regarding the precipitation threshold for compliance.

RESPONSE

The passage with be changed to "equal to or greater than" as that was the Department's intent. We change equivalent to equal because an equivalent snow storm would not overload a treatment system and be justification for noncompliance.

21. COMMENT

There was a request to remove aluminum from the list of metals to be tested, citing the absence of any water quality criteria.

RESPONSE

Monitoring is appropriate because aluminum is associated with mine drainage. While Maryland currently has no water quality criteria for aluminum, other states do, and an aluminum standard could be established at a future triennial review. The data will be useful.

22. COMMENT

Regarding Part IV.D.2.c, there was a request to reduce the minimum employee training to once per year, as is proposed in General Permit 12-SW.

RESPONSE

The Department agrees as that would be in line with the Department's goal to uniformly apply storm water requirements to industrial activities.

23. COMMENT

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Regarding Part IV.D.2.e, because it is a new provision, there was a request to change the three-year history requirement to become effective three years after the permit is issued.

RESPONSE

This passage shall remain. The text was taken from the EPA's multi-sector storm water permit, which has been the product of extensive comment. The permittee will be complying with the record-keeping requirements as long as they document the information to the best of their ability.

24. <u>COMMENT</u>

Regarding Part IV.D.2.f, there was a request to define significant spills and leaks, as is proposed in General Permit 12-SW. The issue about the three-year record was also raised here.

RESPONSE

The Department agrees to add the same text. Regarding three-year record, see earlier response.

25. COMMENT

The spill or leak notification threshold in Part IV.D.2.h is too broad.

RESPONSE

The Department has changed that sentence to "The Department shall be notified of any significant (as defined in Part IV.D.2.f) oil spill or leak, via the Maryland Department of the Environment's Emergency Spill Response number at (866) 633-4686. This number is monitored 24-hours a day."

26. COMMENT

There was a comment to modify the section on facilities subject to SARA Title III (Part IV.D.2.i) to recognize the beneficial use of ash.

RESPONSE

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This permit cannot modify or interpret SARA requirements. If reportable materials are being used in a beneficial manner and are not a source of contamination, that can and should be described in the required additional narrative.

27. COMMENT

There was a comment to modify Part V.E. Additional Monitoring, to clarify that it pertains to permitted outfalls and listed pollutants only.

RESPONSE

The Department prefers to leave the text as is for consistency. The passage is taken directly from 40CFR122.41(l)(4)(ii) and is used in all of the individual and general discharge permits. By its context, those regulations imply that this is monitoring associated with compliance (i.e. permitted outfalls and listed parameters) and the Department interprets the passage that way. However, this interpretation does not override the permittee's obligation to report elevated pollutant levels that might be cause for modification of a permit.

28. COMMENT

Specify which unit of the Department shall receive discharge monitoring reports that report that there was no discharge.

RESPONSE

All discharge monitoring reports shall be submitted to the two addresses on page 22 of the draft permit. Please understand that "monitoring results" include the observation that there is no discharge.

29. COMMENT

There was a comment, regarding Part VII.I asking that references to other water bodies be changed to other impaired water bodies.

RESPONSE

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The tentative language remains appropriate. Though far downstream impacts are unlikely, it is the Department's intent to protect water quality standards regardless of whether or not those waters are impaired.

30. <u>COMMENT</u>

There was a request for guidance on conducting a Tier II anti-degradation review

RESPONSE

If required, a Tier II review would be conducted by the Department, not the registrant.

31. COMMENT

There was a request regarding Part VIII.C.3, to index notification of an upset to within 24 hours of becoming aware of an upset.

RESPONSE

The Department agrees.

32. COMMENT

There was a request to add "permitted wastewater and cooling tower discharges" to the eligible discharges described in Part I.B., citing reference to such sources in Part III.A.b.iii.

RESPONSE

The eligibility list shall remain unchanged. The Department is unaware of any significant demand for discharges other than storm water and groundwater from the facilities regulated by this permit. The Department will address any such outliers with individual permits and will edit the text in Part III.A.b.iii so that it is not misleading.

33. COMMENT

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Regarding Part I.E.5, there was a request to change "shall be required" to "may be required."

RESPONSE

The Department agrees, as its intent was not to automatically require an individual permit.

34. COMMENT

Regarding Part I.E.7, there was a request to establish a 90-day time limit for review and for the Department to notify an applicant when an NOI will be processed as an application for an individual permit.

RESPONSE

The Department's goal is to process an NOI within 120 days. As for notification, this would be consistent with existing procedures for processing an individual permit application. It is not appropriate to put either in the permit as a requirement, as the permit can regulate only the permittee, not the Department.

35. COMMENT

Regarding Part I.F.1.e, there was a request to interpret what that provision means.

RESPONSE

The Department derived this text from 40CFR122.64(a)(4). For surface coal mines, that would describe closure and completion of reclamation requirements. For a tipple, that would describe closure and removal from exposure of any polluting materials.

36. COMMENT

Regarding Part I.F.1.f., there was a request to remove "likely to be violated" and remove reference to narrative water quality standards.

RESPONSE

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Narrative limits are required by State regulation (COMAR 26.08.02.03B). While there is a subjective aspect to the use of "likely" and the nature of narrative standards, the Department can act on these actions only if it can defend its conclusion that a standard is or is likely to be violated. That is sufficient protection from any arbitrary decisions.

The following changes were made in response to comments received, new information received or from further internal review. This section shall serve to amend the permit fact sheet that was prepared for the tentative determination.

1. CHANGE

Delete Part I.C.8, which is the reference to construction storm water.

2. CHANGE

Preface Part I.E.6 with the statement "For persons directed by the Department to obtain an individual permit to achieve water quality protections".

3. CHANGE

Change Part I.F.2 to read "If the Department notifies the permittee of its intent to terminate permit coverage as a result of one of the conditions listed in Section F-1 above, the permittee must apply for an individual permit immediately. If there are periods of discharge between the notice to terminate the general permit and the effective date of the individual permit or the date that a permit is denied, the facility operator and owner are accountable for those discharges and any violations of state and federal law are subject to penalty as detailed in PART VI."

4. <u>CHANGE</u>

Remove "non-controlled surface mine drainage and mountaintop removal areas from list of authorized discharges in Part IV.B.1 and from Footnote F.

5. CHANGE

Remove Footnote e (regarding change of stream pH) from Part IV.B.1.

6. CHANGE

In Part IV.B.1: Footnote c (regarding manganese) change the beginning of the sentence from "Monitoring of" to "Monitoring and limitation of"

7. CHANGE

Change metals monitoring frequency to once per year.

8. CHANGE

Two sections of Part IV were identified as "D." So Storm Water Runoff is now E, Wastewater operator Certification is now F, and Removed Substances is now G.

The Department has changed the opening paragraph of what was identified as Part IV.D to read "All construction and mining activity shall be in accordance with Best Management Practices (BMPs) to control storm water runoff including the conditions of the mining permit issued by the Maryland Department of the Environment and the Sediment and Erosion Control Plan approved by the Soil Conservation District. BMPs shall include treatment requirements, operating and maintenance procedures, prohibitions of activities, and other management practices to control runoff from the haul roads and construction areas so as to prevent or reduce the contribution of pollutants to the waters of this State. The BMPs shall be addressed by completing a storm water pollution prevention plan (SWPPP) which shall be updated as necessary and available on site at all times."

9. CHANGE

Insert "another general permit" back in Part I.H.4

10. CHANGE

Part IV.B.1, Footnote a: Change "equivalent to" to "equal to or greater than"

11. CHANGE

Typo in Part IV.B.1, Footnote i: Change "water weather" to "warm weather"

12. CHANGE

Part IV.B.1, on rows for specific conductance, chloride, sulfates, metals, and selenium, make the following changes:

Retain only first sentence of footnote "i" for specific conductance, chloride, and sulfates and replace "indicative discharge" to "measurable discharge."

Transfer remaining text from "i" to "j" and specify monitoring frequency as one/year.

Require that metals be reported as both total and dissolved.

Identify selenium as total selenium.

13. CHANGE

Reduce temperature monitoring frequency for post closure areas to one per month.

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14. CHANGE

In what was incorrectly identified as Part IV.D.2.c, change employee training frequency from twice per year to once per year.

15. CHANGE

In what was incorrectly identified as Part IV.D.2.f, add "Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances."

16. <u>CHANGE</u>

Change the next to last sentence of what was incorrectly identified as Part IV.D.2.h to "The Department shall be notified of any significant (as defined in Part IV.E.2.f) oil spill or leak, via the Maryland Department of the Environment's Emergency Spill Response number at (866) 633-4686."

17. CHANGE

In Part VIII.C.3, after "24 hours" insert "of becoming aware of an upset."

18. CHANGE

Change Part III.A.b.iii so that there is no mention of process wastewater or cooling water.

19. CHANGE

In Part I.E.5, change "shall be required" to "may be required".

20. CHANGE

Add some text to effluent page Footnote g to clarify where the temperature mixing zone begins.